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The purpose of this publication is three-fold: (1) to facilitate the organization of outstanding programs by directing attention to the orientation of a good program and to the role of administrators and faculty in its implementation; (2) to assist in the improvement, articulation and evaluation of programs already underway; and (3) to forewarn of possible difficulties in and deterrents to program development. The able youth should have both acceleration and enrichment. An improved program for able students will benefit the education of all children in the school. The administrator must plan well, provide the needed resources and strive for a balanced program developing both academic and creative talent. The program must be implemented by talented teachers, alert guidance counselors and well-maintained facilities. Although planning is directed at the local level, the able student must be considered in a larger context. A realistic program must concern the whole student body. Evaluation is important to determine whether the program for able students achieves its purpose. Background materials are included in the study.

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Guide to Planning for Able Pupils

Curriculum Development Series No. 2

COMMONWEALTH OF PENNSYLVANIA
Department of Public Instruction
Harrisburg

1962

COMMONWEALTH OF PENNSYLVANIA

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Message from the Superintendent of Public Instruction

I have encouraged the writing of this guide because among our young people there exists a wide spectrum of ability which must be tapped and even exploited to insure the progress of knowledge. In the past several years we have been deluged with educational comparisons which have tended to disparage the American educational system and its achievements. Regrettably, in too many areas of our nation the result is regression—a flight to the seeming security of hallowed methods and materials. Such a hegira into antiquity is fruitless: one nation's educational system is not necessarily applicable to another nation, and this trait of individuality is also a characteristic of the several states. Even the duodecalogue of twenty-one educational commandments may not be suited to every locality at every time. In the Superintendent's Message in the first guide of this series, ***Guide for a Comprehensive College Advanced Placement Program in Pennsylvania,*** I pointed out the vast strides that Pennsylvania has made in providing a vital, flexible, forward-looking program: the use of the College Advanced Placement Examinations in 1953, the abandonment of the Carnegie Unit regulation in 1957, the elimination of conventional scholastic ranking, based upon teacher grades of incommensurable subjects, the provision of libraries and other instructional materials, and the encouragement of individualized study and progress.

As we increase the opportunities for students and expand, deepen and strengthen the curriculum, we must provide commensurate teaching service. Competent, scholarly, talented teachers must be encouraged, aided, honored and rewarded. Such teachers do not happen by accident; they are developed. Within the next year minimum entrance requirements for the freshmen in the fourteen State Colleges will be 100 points higher for those entering teaching than for those entering other programs. The highest College Board Scholastic Aptitude score will be required for those preparing to teach social studies; at a high, but somewhat lower score will be those preparing to teach English, mathematics, and science. This strenuous upgrading of the teaching profession must in turn result in the upgrading of all other professions and in the improvement of technical education.

Further, a good program can not be disjointed or fragmented. It can not "begin" at tenth, or seventh, or fifth grade level anymore than education of the best minds dare stop at twelfth grade, or college graduation, or even upon the achievement of a graduate degree. Planning a good program should begin with the first contact that the school has with the child or with his parents. It should reflect the responsibility which the school, as an agent of society, has to the pupil, to the community, and to the nation.

In younger cultures the plaudits of the masses are reserved primarily for the warrior, the athlete, and the fakir. In further developed cultures, significant honor and emphasis are given to the philosopher, the scientist, and the teacher. The words of Alfred North Whitehead may well be quoted again: "In the conditions of modern life the rule is absolute: the race that does not value trained intelligence is doomed. Not all your heroism, not all your social charm, not all your wit, not all your victories on land or at sea can move back the finger of fate." We must therefore encourage and nurture a widespread and universal love and respect for learning in all fields and enhance this with understandable communication between the esoteric expert and the general public.

Charles H. Boehm

Preface

Able pupils have outstanding academic or creative talents; their abilities exceed the abilities of average pupils to such degree that the regular curriculum will not suffice to meet their needs. Curriculums must be adjusted to enable these pupils to fulfill their potential.

This publication is a presentation of basic concerns in program planning for able pupils. Its purpose is three-fold: to facilitate the organization of outstanding programs by pointing attention to the orientation of a good program and to the role of administrators and faculty in its implementation; to assist in the improvement, articulation, and evaluation of programs underway; and to forewarn of possible difficulties in and deterrents to program development. It is not a course of study or a curriculum outline, nor does it review the literature, current research, or programs already established. It is intended to be short, concise, and especially useful in initial planning.

At the present time, individual and group IQ tests are the tools most used in the identification of able youth. However, this publication seldom refers to specific IQ ratings, which are at best only one indication of ability. Education of the most able youth existed for centuries before IQ tests were invented, and will remain when the IQ test has become an ancient educational curiosity.

Furthermore, there need be no argument on "acceleration vs. enrichment." The able youth should have both, if the most effective use is to be made of the years spent in school. In curriculum planning the questions for consideration are when to accelerate, how best to enrich, and how most effectively to interrelate these two aspects. Many facets of a good program for able pupils will reflect practices which are part of a good educational program for all pupils. Conversely, planning a good program for able pupils should result in improved education for all the children in the school.

Definitions

Academically Gifted: The pupil whose academic ability places him in the top one percent of pupils in his chronological age group.

Academically Able: The pupil whose mastery of academic skills, understanding of academic materials, and achievement in one or more academic subjects places him in the top fifteen to twenty percent of pupils of his chronological age group; whose intelligence or prior achievment or other academic qualities indicate a potential for achievement in the top fifteen to twenty percent of his chronological age group.

Creatively Gifted: The pupil who has the ability necessary to devise, plan, or discover new ideas, materials, or solutions to problems and who can develop them with skill.

Creatively Able: The pupil whose plans, ideas, and solutions to problems are competent although not unusual and who can develop them with skill.

Talented: The pupil who has a natural aptitude in a special field and is capable of high performance under training, as in music or visual art, but who does not necessarily create new material.

Acceleration: Pupil Acceleration. Any plan through which the pupil completed the K-12 school program at an earlier than average chronological age or in less than the usual twelve years of school.

Acceleration: Subject Matter or Course Acceleration: Teaching a course or subject matter at a grade level lower than the one at which it is usually taught: e.g., biology taught in the ninth grade rather than tenth or eleventh is an accelerated course; decimals taught at fourth-grade level instead of fifth is acceleration of subject matter. College courses which are taught in the twelfth grade are also acceleration of subject matter.

Enrichment: Lateral Enrichment: Subject matter or experiences beyond the regular course of study which increase the depth or breadth of the pupil's understanding or effectiveness. For example, pupils in a literature class are given an opportunity to hear a famous modern poet read; or, pupils in science or social studies are given experience in advanced research method.

Enrichment: Supplementary Enrichment: Subject matter or experience in addition to the regular curriculum; not necessarily related to any course of study, but contributing to the total educational growth of the pupil. For example, a "creative discussion" group.

Advanced Placement: A college level course offered in high school, which, if successfully completed, may result in attaining advanced placement in college with or without college credit for the course.

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Chapter One

Introduction

A good program begins with good planning. Since the best program for able pupils is one that is locally determined, developed, and implemented, the administrator has the initial responsibility. He should lead community and faculty study of the need for the program and of the type of program and curriculum which will best serve the pupils. Community study should include a survey of community resources and attitudes. It may reveal a need for adult education on the purposes of the program. (Sometimes, to provide a really good program, the administrator must resist pressure from the well-meaning but partially informed community leader, or the adamant 'educationist.) Faculty study includes determination of the criteria for selection of the pupils who will participate in the program; selection of the type of program organization for able children which will best serve the individual child and the school as a whole; and liaison with other schools and other educational agencies in the community.

When the program reaches the operational stage, it is the principal's responsibility to see that it functions smoothly. All too frequently, teachers, department heads, and supervisors at the secondary level develop an elective course intended to serve the needs of able pupils, and then find only two or three pupils in the class because required subjects are given at the same period.

The administrator should strive for a balanced program which provides opportunity for the optimum development of both academic and creative talent. Implementation of the program requires capable, talented teachers, well-stocked and well-maintained instructional materials centers, well-supplied laboratories, and a plentiful supply of all types of consumable materials. Provision of an effective guidance program for able youth involving both classroom teachers and guidance counselors should also be of paramount concern.

Consideration: The Role of the Administrator in the Education of Able Children

The County Superintendent

1. Leadership—Stresses the need for programs for able children
2. Provides consultive services
3. Acts as liaison between county office and school districts
4. Provides liaison with colleges and other institutions of higher education.

The Superintendent or Supervising Principal

1. Initiates study of need for program
2. Secures the support of the school board
3. Budgets adequate funds
4. Secures consultant nelp
5. Provides district articulation and coordination
6. Provides competent faculty
7. Provides guidance services
8. Provides adequate materials
9. Organizes high-quality in-service programs
10. Helps to plan comprehensive programs of evaluation
11. Develops philosophy favorable to the program with the principals

The Building Principal

1. Accepts responsibility as educational leader
2. Participates in faculty planning
3. Schedules program
4. Provides liaison with community
5. Uses sound policies for grouping pupils
6. Insures parent-faculty understanding
7. Participates in high-quality in-service programs
8. Selects a key staff or faculty member, interested in the program, to provide additional momentum for project
9. Provides effective supervision
10. Helps to develop programs of evaluation

Consideration: The Faculty

The expression "Only diamonds can polish diamonds" has implications for the selection of teachers for able students. Yet it may become a question of which diamond polishes the other, for a teacher who is a truly brilliant adult will be mentally far ahead of even the brightest youth. Therefore, along with superior intelligence, the patience and adaptability which are generally accepted to be attributes of a good teacher are especially necessary in the teacher of able pupils.

Probably it is well if the teacher of able children also teaches average children either for part of the day or in alternate years. Such contact helps the teacher to maintain an appreciation of how much able students vary from the norm, and conversely of how many characteristics they share with all children and youth.

The teacher must have a good knowledge of the subject area in which he works. "Learning together" between teacher and pupils can be a stimulating, rewarding experience. It can also be a waste of time, and perhaps even a learning of misinformation. The teacher must have enough personal security to say "I don't know" but, if he is to hold the respect of able youth, he must not have to say it too often. The maximim "What thou dost not know, thou canst not teach" retains its truth.

The teacher should show evidence of scholarship or creative ability. Able students are stimulated by a teacher who publishes materials, exhibits art or craft work, plays in a symphony orchestra, participates in a little theater or dance group, or is recognized for some achievement in the community. Teachers should be given frequent opportunities for enriching experiences and the teachers should take advantage of those which are provided. Such opportunities are of many types, not all of them large scale or expensive. For example:

subscription to an educational news service which provides short reports of conferences, legislation, educational experiments, as well as other educational news, and new materials for the gifted, able, creative, and talented.

new books in the faculty library.

in-service training programs—(such as a "busman's holiday" faculty trip to observe programs for able students in another school system)

attendance at state and national conferences (payment of a teacher's expenses at a conference may be school district money well spent.)

salary increases for advanced university work in teaching field or in closely related areas

summer workshops or seminars

observation of the able students in other programs, subjects, or classes in the school.

sabbatical leave for further study.

The teacher must know when to direct the learning situation, and when to let the student explore on his own. Even the best-informed teacher must be able to face challenges from able students with equanimity. Brilliant students are questing, questioning, eager, intense, and sometimes iconoclastic individuals. They do not hesitate to debate what they read or hear. They need to have guidance in evaluation, interpretation, and analysis of materials and data. Some of these students are highly sensitive, and easily crushed when their questions are met with rebuffs from the teacher. Yet, it must be admitted that a highly intelligent or talented student is not by that fact a well-mannered student. In this case, to give him social grace is as important as to give him information.

The teacher must have a good knowledge of the learning characteristics of able pupils. He must exercise prudent judgment, particularly when he participates in the selection of gifted, creative, or able pupils. He must set attainable standards and goals for pupils. Faced with students of superior ability whose achievement is a challenge to the teacher, the teacher in turn is apt to continually raise standards. The teacher rationalizes these standards by believing that "students will give you what you demand" and that "stretching is good for them." Two aspects of this are true: (1) Students need to develop good work habits and skills, and (2) students need intellectual discipline.

However, there are certain detrimental effects from teachers' standards which are set too high for the student. Two probable reasons for such standards are that the teacher uses them to camouflage his own inability to meet fully the needs of the students or to insure the personal prestige which he derives from superior work by students. Able students are usually (although there are exceptions) eager to succeed. They are also apt to be competitive; in fact, they create competition among themselves within the group. While these students are mentally well balanced, socially active and secure, and able to carry a heavy work load, more situations exist than are generally admitted where students overwork, become physically weakened, or emotionally distraught from the effort to meet unrealistic standards. Some able students are never satisfied with their own performance. Continual raising of standards may contribute to their self-dissatisfaction and emotional instability. Able students, like all other pupils, need sufficient repetition for mastery, but useless repetition, busy work, and time-consuming, poorly planned homework assignments should be eliminated.

Faculty study and planning are necessary for initiation and full implementation of any program for able children. There must be agreement concerning the necessity for the program. Sometimes a faculty studies its student body carefully and reaches a justified conclusion that no program is needed. The school, the faculty, and the students have still benefitted from the study—teachers will be better aware of the ability levels of the students, and will have a better basis for future recognition of able youth. Even though no pupils may qualify under a strict definition of "able," such a study can benefit those who are relatively more able. When it is agreed that a program is necessary, there should be a faculty and administrative consensus as to the form the program should take. The program should be thoroughly studied from the view of its effect upon the academic achievement and the social adjustment of both the able and the average children in the school. Each teacher should clearly understand his part in the program or his relationship to it. Articulation of faculty understanding from elementary school through college level is of major importance.

Consideration: Guidance

Guidance for the able is sometimes hampered by the popular misconception that the able need no guidance—they can guide themselves. Simple observation will refute this—how many brilliant students have been influenced by pressure from parents and other relatives to enter certain professions because of family tradition, or because of the social prestige associated with these professions. Too often such "guidance" results in an unhappy, irritable physician or clergyman, and the real losers are those whom he tries to serve.

The guidance counselor must be an alert, sympathetic, sensitive person, capable of some sympathy with a brilliant or talented child or adolescent. He must realize when guidance is necessary, and when it is not. An occasional, truly gifted pupil may have so many abilities, so widely distributed, that vocational and educational guidance is very difficult, and the responsibility for helping him to make choices is very great. Specific areas in which the counselor can be very helpful include:

The Pupil's Program. The counselor should see that the student's program gives him an opportunity to explore all his abilities and talents. It should be a balanced program which gives him the courses necessary for college entrance or vocational placement, offers him a challenge, and when desirable offers advanced placement so that he can reach the years of professional preparation in a shorter time.

The Pupil's Achievement. Frequent evaluation should be made to determine whether the pupil's achievement reaches his potential as indicated by observation and by valid tests. When it does not, analysis of the possible causes, perhaps including diagnostic testing, should be made and remedial measures instituted.

The College Dilemma. The counselor can do much to ease the frantic hysteria surrounding college entrance by:

1. Encouraging the school to provide a curriculum well suited to the college-bound student.
2. Having wide knowledge of college openings and scholarship opportunities.
3. Encouraging students to make their college plans early and realistically.

4. Helping parents to plan for the pupil's college program and financial needs.
5. Establishing a personal contact with the personnel of colleges attended by past students.

Vocational Choice. The counselor's vocational guidance should include

1. Career conferences at which young people may gain information concerning a profession or other vocations.
2. Occupation interest inventories with the student who is unsure of his choice.
3. Appraisal of pupil interests, capabilities, and inclinations.
4. Community liaison in job placement by stimulating the interest of business, industry, and the professions in the vocational choice of able pupils.
5. Aid to students in finding summer job opportunities which will help them in exploring their abilities.

Personal Guidance. On an average, able pupils are well adjusted, socially competent individuals. Many of them are outstanding school leaders. However, some able pupils have severe adjustment problems. They come into conflict with other pupils, parents, and teachers. Some have retiring personalities; some are not accepted by their classmates. Some have problems stemming from conflict with community mores and prejudices. For the guidance counselor, the problems are especially serious because a poorly adjusted brilliant student is usually a great loss to the school and to the community. The guidance counselor should use every technique at his command with the pupil, the school, and the family to reach an adjustment which will be of maximum benefit to the individual pupil and to the other pupils in the school. When the nature of the problem falls outside the province of the school, he should use the help available through referral to appropriate community services.

Discriminating Identification

Chapter Two

Consideration: Criteria for Selection of Able Pupils

The School

Specific criteria are best developed at the local level, and should be consistent with generally accepted practices. Administrators, faculty, and guidance personnel responsible for their development should be thoroughly familiar with the literature concerning education of academically talented, creatively talented, gifted, and able children.* They should observe the selection criteria in other school systems. They should also be thoroughly familiar with the intellectual, socio-economic, and attitudinal makeup of the student body from which the able children are to be selected. What provisions are needed, how such provisions should be initiated, how effective they will be, and which children will benefit from them depend at least in part on the total school situation in which the able child is found.

Example:

Charlotte is a fifth-grader with an IQ of 129.	Jeannette's individual IQ test score is 127; her group test score is 120.	Charlotte has had all "A" grades since second grade.	With hard work and her mother's help Jeannette maintains average "C" grades.
Charlotte's mother is dead; her father is a skilled machinist. Her older sister (IQ 110) is a successful model in a clothing store specializing in high-priced furs. The sister keeps house with Charlotte's help. A younger brother (IQ 67) is in a special class for the mentally retarded.	Jeannette's mother has a master's degree in social science and is active in many club groups. Her father is a pharmacist.	Charlotte attends Sunday School but no out-of-school activities for girls are available in the neighborhood.	Two afternoons a week she attends weekday religious instruction classes which include foreign language instruction. She has violin lessons, Saturday class in modern dance, scouts, and a neighborhood girl's club.
The enrollment in Charlotte's school is 350 and the median school IQ is 92. Charlotte's class of 30 is split sixth-grade, fifth-grade group. The median class IQ is 94, and the range from 88 to Charlotte's 129. Jimmy and Bobby also score above 115.	The enrollment in Jeannette's school is 923, and there are three fifth grades which are grouped homogeneously. The median class IQ is 122. On individual tests there are children who score 145, 153, and 171.	Charlotte is a large, healthy girl. She is captain of the safety patrol and some of the teachers complain that "she thinks she runs the school."	Jeannette is rather thin and nervous. She has recently been treated for allergy.
		Planning needs to be done for Charlotte, and also for Jimmy, Bobby, and for Howard, whose IQ score is 111, but who shows great creativity in art. There should also be some examination of class organization in this school.	The planning which needs to be done for Jeannette is not the provision of more academic or creative opportunities, but adjustment of her overall work load. However, there are other children in her class for whom plans must be made.

**Annotated Bibliography on the Education of Able Children*, Bureau of Curriculum Development, Department of Public Instruction, Harrisburg, Pa.

The Pupil

Able pupils differ from each other in personal characteristics as much or more so than do average children. The able child may be neat or disorderly, patient or impatient, courteous or discourteous, shy or conceited, unsure or overconfident. He may read before he comes to school, or he may be a late reader. Therefore, all sets of criteria, all specific listings of the characteristics of gifted, creative, talented, or able children should be used with caution and discernment. The best criteria are those which will select students who are gifted, creative, or able, who have a true potential for development, and who really need a program different from that provided for the average child in the school.

Some indications of outstanding ability are readily observed. The child who verbalizes readily (excluding the loquacious moron), who has many interests, and shows depth of understanding, comprehension of abstract reasoning, and creativity or unusual talent in any field, usually attracts attention to his potential ability. Yet even for these pupils, careful study must be made to best determine the extent and direction of their abilities. What has been said many times will bear repetition once again—all other things being equal, the younger the able child is when he is identified, the better is the planning that can be done for him, and the greater is his opportunity for full growth and development.

Testing

The criteria to be used in identifying the able pupil should be based upon a good testing program and good recordkeeping system for *all* the children in the school. Intelligence tests, or any other tests, are not infallible but they are the best available standardized guide for *screening* students. Careful consideration should be given to the types of tests to be used, and to the total evaluation of the individual child. Those who use the information gleaned from tests should be aware of how the norms were established, what the aim of each test is, how it should be evaluated, and what its limitations are. To misuse or misunderstand the implications of a test is far worse than to do no testing at all.*

*Gallagher, James J.—"The Gifted Child in the Elementary School"—*What Research Says to the Teacher* (17)—Department of Classroom Teachers, American Educational Research Association, National Education Association—pp. 6-18.

Where students take intelligence or achievement tests under the auspices of some out-of-school activity, the validity of test results must be protected. This can be accomplished by good liaison between the school and the out-of-school agency to insure that different tests (not different forms of the same test) are used by the school and the other agency. This is particularly applicable in identifying gifted children.

As a minimum, a whole school testing program should include group intelligence testing at crucial points in the academic life of the child and particularly at points where selection and preplanning are necessary. The testing program can be broken down as follows:

Achievement testing: at such intervals that regular appraisal may be made of the pupils achievement in relation to his potential.

Diagnostic testing: where there is evidence that the pupil's achievement is seriously retarded.

Aptitude testing: as related to course selection and major occupational outlets and interests.

Prognostic testing: in major subject areas in secondary schools.

Occupational inventories and personality evaluations are highly desirable when of use to the individual child.

Further Screening

Inspection of the results of the whole-school testing program may reveal potentially able pupils at any level. The amount of variation from the norm which indicates the need for special planning for the child should be determined by the individual school. The further screening of those who reach this level should include:

1. Individual tests of mental ability administered by a psychologist.
2. Consideration of the child's physical health.
3. Evaluation of emotional balance and stamina, especially as related to maturity, interest, and need for challenge.
4. Assessment of the child's school adjustment with consideration of his potential as well as its utilization.
5. Information on the child's total in-and-out of school program as related to his interests, contacts, and enrichment opportunities.
6. Teacher observation of the child's creativity, personality, responsiveness, reac-

tion to pressure or tension, or group activity.

7. Parental reaction, including recognition of and attitude toward the child's abilities, their emotional support of him, and their acceptance of special planning for him.

Once a pupil has been selected and entered into the program for able pupils, there should be a continuing evaluation both of the pupil's success in the program and of the program itself. Any time it is felt that the child is not well adjusted to the program, or the program is not meeting his specific needs, further study should be made. Such further study might include diagnostic testing to reveal academic areas in which he is weak or in which the program is not meeting his specific needs. Other factors such as his physical status (particularly visual, audial, or nutritional deficiencies) emotional balance, out-of-school activities, motivation, and culture status should be included. This additional study may reveal a few instances where the pupil's actual ability is less than that indicated in the test situation. These pupils should be reassigned as tactfully as possible to programs more closely related to their educational needs.

Continuing liaison with parents is essential. They should share responsibility for the development of the child's abilities. Such techniques as supplying parents with lists of suggested leisure time reading for pupils, television programs of enrichment value, records, films for use on home machines, or of places of value for family visits or trips enable them to participate constructively in the child's school progress. Participation should increase their understanding of the child's capabilities. In some cases it will also point out his limitations and prevent undue exaggeration of his "brilliance" by fond relatives.

In Establishing Criteria for the Selection of Able Students it is necessary:

To Know		To Determine
About the School and the Class:	*About the Individual*:	*About the Program and School Activities*:
The total enrollment and class size	His grade level or class placement	What type of program is practical. (e.g. homogeneous grouping, grouping across grade lines, primary unit, special enrichment.)
The median mental age of the group	Group test and individual test results	How far the individual exceeds the norm. How many able individuals there are. Where they are located in the school population.
The average level of ability in art, music, creative writing	Ability in art, music, creative writing	The feasibility of providing extra opportunities in art, music, creative writing, or other creative activities.
The average achievement in academic subjects	Achievement in academic subjects	Whether accelerated academic classes are practicable. How far the individual student exceeds the class mean or median.
The percentage of students who are college bound	College plans	Use of advanced placement classes and cooperative arrangements with colleges, such as college attendance prior to high school graduation.

To Know		To Determine
Nutritional and health status	Nutritional and health status	Study work load.
Out-of-school activities available in the community	Participation in out-of-school activities	Need for activities through which leadership and group participation may develop.
In-school cocurricular activities	Participation in co-curricular activities	Program for development of leadership and group participation for the individual able student.
Socio-cultural status of community	Cultural background	Guidance needs and curriculum adaptations.

Consideration: Creativity

From an educational point of view, one very valuable attribute of the able pupil is creativity. The need to develop the creative artist, musician, and writer has long been recognized, but society now realizes its need for the creative scientist, mathematician, and social leader.

Recent studies (see Bibliography) have been undertaken to determine whether traditional measures of intelligence also measure creativity, how early in a child's life scientific talent can be demonstrated, and what the characteristics of the creative pupil are. These studies are relatively new, but some tentative conclusions can be drawn.

1. Intelligence tests do not adequately measure creativity. In this area new measures must be developed to include a wider range of intellectual and nonintellectual factors.

2. At least some aspects of creative and scientific talents can be identified early through observation of the child's school experience.

3. Characteristics thought to be most valid measures of creativity are originality, redefinition, adaptive flexibility, spontaneous flexibility, associational fluency, expressional fluency, ideational fluency and elaboration.

4. The creative pupil usually is less docile; his thinking is more likely to be divergent than convergent. He is more apt to see unusual relationships, to move rapidly into areas of thought, to "go off at a tangent" rather than to follow congruent patterns of thought.

5. Personality characteristics of the creative pupil are thought to include self-sufficiency, stability, independence of judgment, self-assertiveness, ability to take risks, and emotional sensitivity.

The implication for the teacher is that he must be aware of all of the areas in which pupils have an interest; that he must not put a premium on conformity. Certainly, in any group situation, management and control are necessary, but there must also be time, place, and room for the unusual and the humorous, for new ideas, for experiment, and for disagreement.

The implications for the school are that teaching loads should allow the teacher time for observing each student carefully; and for providing opportunities for the development of creative talent whenever it is discovered. If the pupil has talent greater than the school's resources can serve, the school should give the pupil's parents all possible assistance in making provisions for the education which he should have, including utilization of all other educational opportunities. A third implication for the school is that creative teaching should be encouraged for all teachers. When the administration of a school is authoritarian and rigid and teachers must be conformists, the same attitude is carried into the classroom. The teacher cannot encourage creativity or countenance nonconformity when he himself is denied this form of self-expression.

The best school contribution to creativity is a wholesome, happy school atmosphere. A balance between requirement and originality, between restriction and permission, between discipline and self-expression insures the necessary flexibility coupled with security which permits creativity to express itself and flourish. Creative social leadership can be developed in such an atmosphere.

Experimentation

Creative Planning

Chapter Three

Consideration: Criteria for a Good Program

Education in Pennsylvania is dedicated to the ideal of providing the best education for every student, as a member of a school group, as a member of society, and as an individual. Therefore, in planning the education of any one child, or of any group of children, it is necessary to consider the plan in terms of its benefits to:

the future development of society (which is dependent upon it),
the state and community (which support it),
the whole school (which surrounds it), and
the individual (who experiences it).

Provision of the best education possible to our most able students is imperative to maximum social growth. The development of social conscience is equally as important as the development of academic or creative talent. Personal integrity, good moral judgment, courage, and the ability to place the needs of society above personal considerations must be ever present in the character of our able youth.

Therefore, in planning the program for able youth, we must first think of them in a larger context than as students in the local school. We must consider them as citizens of the United States who must be given the opportunity to make their greatest contribution. Educators at the local level have a responsibility—to the immediate community, to the state, and to the nation as a whole. The mobility of population increases this responsibility. All public school programs for able children should include generally accepted basic materials, routines, and skills so that a student may move easily from one school situation to another. This restriction in no way hampers true educational experimentation in materials, teaching methods, or school organization. It means that the educational structure of the program is in harmony with the child's social and educational needs.

The program for able youth must be planned with consideration for the service which the program gives to the state and to the local community, and for the support which the program receives from them. This means that the program must be:

Realistic in Terms of Finance and Facilities

To underfinance programs for talented youth is to impoverish the community in terms of lost leadership. The program's needs are many—teachers with vision and paramount skills, well-equipped, modern laboratories, instructional materials centers, resource centers, a wide range of textbook materials necessary for the development of artistic and creative abilities.

Forward Looking in Terms of Community Expansion

Consideration must be given to the role that education of able youth can play in vocational and community development. It must also be given to the effect that such expansion has upon the school population and upon the demand for school services. New industry and new community development are now encouraged for economic reasons. Let them also be encouraged as an opportunity for the development of able youth.

Coordinated with All Other Educational Opportunities

Good liaison between high schools and colleges provided by administrators, guidance counselors, and deans will result in a coordination of effort which will greatly facilitate the student's planning, improve his preparation, and shorten the preparation time necessary for him to become a productive citizen. Through such coordinated effort the talented students will be given opportunities for the type of education they want and the type of professional training for which they aim rather than having to accept a second or third choice because it is the only opportunity available to them.

Flexible

Sudden spurts of community growth, relocations and redevelopments may necessitate school reorganization or emergency planning. The program of education for able youth should not be a victim of these circumstances—it should be adjustable to overall changes in the school. The better the program fits into the total school program, the better is its service to the community and to the pupil.

It should also be flexible so that it can be geared to new or experimental developments of teaching materials, methods, or programs. ***It should have a well understood provision for the entrance of individual children to the program and their removal from it.*** Provision should be made that such policies are well understood by faculty, parents, and students.

Furthermore the program should:

Coordinate with Neighboring School Systems

School districts within the same college area, metropolitan area, or other regional area should have an exchange of information regarding their programs for able youth. Similar standards of achievement, wherever possible, would do much to ease the student's transition from one school to another, or from high school to college. It would also remove the need for parents to "shop around" for good schools. A partial solution to this problem is the Advanced Placement Program which is used in schools across the nation and which provides courses of study, materials, and standards of achievement for certain high school courses.

Marshal Community Resources

Many schools are making good use of talent and commerce in the community through:

A. Seminars in which community professional people share information with able youth.
B. Utilizing cultural resources. Visits to college laboratories, museums, planetariums, symphony concerts by selected groups of students. These exceed the regular school journey in that the material presented is carefully planned in terms of the interests of the members of a small group of talented students.
C. Summer work opportunities of the greatest educational value to students. The high school junior who is planning to go to law school may benefit more from doing community survey work than from running the cash register in the supermarket; the girl who hopes for admission to medical school might better spend a summer as a hospital tray girl than as a drive-in carhop.
D. Utilizing the facilities of industry to supply job information, job tryout, school-work experience, specialized library and laboratory experience.
E. Scholarship money is more readily available when the educational program for able youth is well understood by the community.

Demonstrate Its Productivity

In a sense the people of the community "buy" education. They are entitled to know what they receive for their collective investment in public education. The best recompense a community can have is knowledgable, openminded, intellectually honest citizens willing to support education. Productivity is best shown when responsible, moral, creative graduates participate actively in community affairs rather than by projects, test results, college scholarships, and honors won.

Challenge the Status Quo

Where a school system and the community which it serves have failed to meet their responsibility to provide an adequate program for able students, where there is lethargy and resistance to such provisions, a dramatically new and different program will be necessary.

Consideration: The Type of Program

A program of education for able children must be realistic in terms of the whole student body. (A true program is not a daydream for the administrator, an escape route for the faculty, or a red herring for the Parent Teacher's Association.)

To plan such a program, the administrator, together with the faculty, needs to take a long, hard look at the school as it now exists. This inspection should determine:

1. What is the present curriculum?

2. In terms of demonstrated achievement and behavior, does it accomplish its purposes?
3. Does it stimulate effort from the able student?
4. Is the staff informed of developments in each subject field and in school organization?
5. Are the teaching techniques varied?
6. Is the curriculum flexible enough and broad enough to meet the needs of the able students in terms of their life goals?

Having determined the status of the curriculum, the administrator and faculty should next consider:

1. Does the curriculum as a whole need new courses, new materials, a new administrative plan, or all three?
2. What percentage of the student body is considered to be able, gifted, academically talented, or creatively talented?
3. Are adequate testing and diagnostic services available?
4. Are the instructional facilities adequate? Is there an instructional materials center? Are enough aides and clerks available?
5. Have administration and staff arrived at a common agreement on terminology, philosophy, goals, program, and procedures?
6. What is the best type of school organization in terms of the able students, the whole student body, the faculty, the physical plant, and community resources?
7. Is an adequate budget provided?

Large enrollments permit a variety of arrangements for special programs for able students; sometimes several operate within the same school. No designation of "best" program can be made: programs differ in feasibility for various school districts, schools, faculties and student bodies. Types of organization and curricular provisions which should be given consideration include:

Admission on Readiness

Some gifted or able children may profit by admission to the first grade before they have reached the usual admission age. Before such admission is permitted each case should be carefully considered by the school administrator, the child's parents, and a qualified psychologist.

Continuous Research

Such consideration should include the total development of the child to this point, and should contain such specifics as:

1. Sufficient intellectual ability to profit by participation in first-grade work. (See Appendix)
2. The physical and mental control required to participate in group instruction.
3. Health and physical development for full-day school attendance.
4. Emotional maturity and social maturity commensurate with that of his age group.

Tests of mental ability and reading readiness, parent conferences, observation and evaluation of the child's behavior patterns, his social opportunities and participation, his physical status, and the degree to which he can function independently as an individual are often useful in making the decision on early admission.

Early admission provides a one-year acceleration for the child in a situation in which he may be readily accepted by his classmates and his teacher. However, early admission must not be regarded as a total provision for the needs of the able child. For example, a child with an IQ of 150, who enters school at five years, 0 months, will at that time have a mental age of 7 years, 6 months. By the time he is ten years of age and has reached sixth grade, he probably has a mental age of 15 years which is well beyond

what he needs for average sixth grade work. At the end of the first year his progress should be carefully evaluated and plans made for his entrance to second grade if he is ready. Sequential adjustments of his educational program may be necessary throughout his school life.

Nongraded Primary Unit

For the able child the nongraded primary unit is essentially an opportunity to complete the work of the first three years in less than the usual time. The fundamental principles in this plan* are:

A. Children vary in their rate of learning.
B. Continuous progress for all children is a major objective.
C. Pacing curriculum experience and instruction to the learner's rate of achievement is essential for an effective program.
D. Flexible organization to provide for periodic regrouping is needed to meet child growth and to further continuous progress.
E. Reading achievement provides the best single criterion for grouping in the early school years.
F. For grouping it is necessary to make certain that all curriculum areas receive due emphasis and that the child's individual needs receive adequate attention.
G. In any regrouping plan it is important that the young child be guarded against the impact of change by making certain that the school program provides experiences which will enable him to adjust as easily as possible to different personalities and surroundings.

The general procedure is to group children as soon as possible during the first year of school on the basis of reading readiness. From that point on, the instructional program is paced in accordance with the abilities and achievement of the group. Regrouping occurs whenever it is advantageous, at which times the achievement and development of each child are reviewed and evaluated. If the program is sufficiently flexible, and regrouping sufficiently frequent, opportunity is provided for each child to proceed at his own rate.

Grouping across grade lines may be used in any subject area to permit the student to work at his own ability level. The student is scheduled with an advanced group only for the subject in which he has special talent. The rest of his time is spent with his regular class group. While this arrangement to date is most often used for reading or mathematics, it also has possibilities of very effective use in specialized areas such as art, music, or creative writing at both elementary and secondary levels. It may be especially effective in senior high school.

The multiple class is defined** as one in which the teacher guides the learning of two or more groups of pupils in two or more courses in one room and in the same period of the daily schedule. It can be especially helpful where there are not enough students to justify classes in certain advanced subjects which are needed by individual able students to meet college entrance requirements or to secure advanced placement. In a multiple class, while four or six students study advanced language, another group may study advanced algebra, while yet another small group of able students studies calculus. The teacher guides and evaluates the students' work. Tape recorders, language laboratories, programmed materials, and other individual instructional devices are essential tools in a multiple classroom.

Homogeneous or ability grouping is more commonly used at the secondary level than at the elementary level. Track programs, honors sections, advanced subject matter grouping are all variations of homogeneous grouping. Much has been written which either supports or discredits this type of grouping. Its chief advantage is that it provides economy of time in the education of able children, presents them with a more constant challenge, and facilitates variations and expansion of program to meet more fully their needs. Its greatest disadvantage is the possible impoverishment of the program and whole-school experience for the other pupils in the school. Currently, a pressing problem is that of fair evaulation, marking, and grading of able, average, and slow learning pupils when they are taught in separate programs. This problem of evaluation is particularly acute at college en-

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*Philadelphia Public Schools, The Continuous Progress *Primary Unit—A Preliminary Statement*—The Continuous Unit Committee, May, 1961.

**The Catskill Area Project in Small School Design, Oneonta, New York, 1961—"Multiple Classes—Learning in Small Groups."

trance levels when grades earned in honors courses must be equated with those earned in regular academic classes.

Homogeneous grouping is useful in elementary schools whose enrollment is large enough to permit two or three full classes at a grade level. It is less desirable where the distribution of enrollment requires split-grade classes. Where there is one class per grade, ability grouping may be done within the class, and may vary from one subject to another.

Cluster grouping is an ability group of three to ten pupils within a heterogeneous class.

Segregated grouping for able pupils is actually a form of homogeneous grouping and shares the advantages and disadvantages of such grouping. Standards for a segregated group of able children tend to be extremely high and comparatively rigid. Formation of such a group usually involves transportation of students to a central point. The chief advantage of segregation over grouping within a class seems to be that children of extremely high attainment and ability have the opportunity for companionship and interchange with more students of their own age and intellectual level. A very bright child is sometimes far happier when he can lose himself in a group than when he constantly bears the responsibilities which fall to "the brightest child in the room." Not every brilliant child is a dominant person nor does every brilliant child posses leadership potential. Conversely, segregation may rob a child of his true understanding of his relationship to others, and may prevent the development of his maximum social effectiveness or leadership. The public school student will not live in a segregated world.

Semisegregated grouping or partial segregation is a compromise position. Able students from several grade levels are gathered together for part of the day for academic work and for the remainder of the day share music, art, physical education or other classes with their regular grade group. There are conflicting opinions as to the social acceptance of students in semisegregated groups by children in the rest of the school, and as to their ability to adjust to a regular school situation following the semisegregated grouping experience. When the administrator and staff fully understand the program, and work closely with parents and pupils, problems of adjustment may be minimized.

Extensive Enrichment

Enrichment groups are recognized in current educational terminology as being of three types:

Vertical enrichment is actually acceleration of subject matter content. The most frequently used type is the telescoping of arithmetic content so that algebra may be introduced at the eighth-grade level. Elimination of duplication and consolidation of subject matter make possible introduction of courses or subject matter not previously a part of the curriculum. The important consideration in a program of vertical enrichment is to plan the wise use of educational time.

Lateral enrichment is provision of greater depth and scope to courses and subject matter already in the curriculum.

Supplementary enrichment is the provision of experiences which promote the student's cultural and mental growth. These may or may not be related to the subject matter of the curriculum; they should always be closely related to the student's needs. Seminar groups, field trips, and attendance at concerts and art exhibitions are types of supplementary enrichment. Much vocational information and guidance are imparted through such programs.

Supplementary enrichment is also used to designate club-type programs devoted to creative writing, dance, discussion, school newspaper, or school and community service projects.

Acceleration of program is feasible, for able pupils need less repetition of material than average pupils; moreover, they can absorb an original presentation which has more depth or is more involved than the presentation for average pupils. Consequently, much introductory subject matter, much illustrative material, and many drill activities can be eliminated from the classtime of the able pupil, giving him the opportunity to progress more rapidly. Opportunity commensurate with ability holds the attention and stimulates the interest of the able pupil. Given the opportunity and adequate materials, he is able to learn some things for himself, and to reinforce other learnings without supervision from the teacher. Some material can be taught at lower grade levels, thus freeing time at the upper grade levels for advanced learnings.

Acceleration of subject matter has an advantage over acceleration of the pupil. When a pupil "skips" grades there are gaps in his essential learnings. When material is accelerated, continuity of essential learnings is retained.

Advanced placement program is offered by the College Entrance Examination Board.

The Advanced Placement Program provides descriptions of college-level courses to be given in schools and prepares examinations based on these courses. Colleges, in turn, consider for credit and for advanced placement the students who have taken the courses and examinations. The program is an instrument of cooperation which extends the educational opportunities available to able and ambitious students by coordinating effectively their work in school and college.*

Details of the program and of its administration can be found in Department of Public Instruction Bulletin, Curriculum Development Series, Number 1, ***Guide for a Comprehensive College Advanced Placement Program in Pennsylvania.***

*College Entrance Examination Board, Advanced Placement Program—1956.

Cooperative high school and college programs give the able student some experience with college work before he leaves the high school. These programs are of special value for the able student with a noncollege or culturally deficient home background. Despite the assurances of teachers, administrators, and counselors, such a student may fear that he cannot do satisfactory college work or that he will not be socially accepted. To experience some college work and campus contact while he still has the social support of his high school classmates and the guidance of his high school teachers may give him self-confidence and ease the transition. The usual arrangements are:

1. Selected students who are high school juniors or seniors take one subject in which they show outstanding talent on a nearby college campus with the regular student body. They spend the major part of the schoolday in the high school program. If upon high school graduation the able student elects to enter this college, he receives college credit for satisfactory work already completed.
2. Selected high school juniors or seniors take one or two subjects in the regular college summer school program. If the pupil's work is satisfactory, and he enters this college following graduation from high school, he may receive credit for these summer courses.

Early admission to college is offered by some colleges and universities to very able youth who have completed the junior high school year. Such students take a regular freshman college course. The high school equivalency certificate will be issued to these students by the Department of Public Instruction upon submission of evidence of completion of three years of successful high school work and one year of college work.

The general experience with this program in Pennsylvania has been that the students do very good college work and that they adjust easily to the college situation.

Summer school programs provide opportunities for both enrichment or acceleration. At the ***elementary level*** their best use is for enrichment. Science experiences, community field trips, reading experiences, discussion, drama or dance groups, day-camp programs, and intro-

duction to foreign language are among the types of programs which are attractive to able children in the elementary school. At the ***secondary level*** summer school programs may provide for acceleration. Cooperative high school-college programs give able youth some college experience in the summer between junior and senior high school years.

Seminars, a type of supplemental enrichment, are a recent development in the education of able students which have been enthusiastically accepted in several communities. Most seminars are conducted for high school students, although they may be offered for upper elementary grades.

Seminars consist of a series of meetings usually held at times other than regular school hours. Selection criteria for participating students include interest, mental ability, aptitude, scholastic achievement, teacher recommendation, and parental consent. Students are required to attend the meetings regularly.

The seminar program is an effective way to arouse community interest in the education of able children. Customarily, the programs are presented by professional and other community adults with special talents who contribute their services. Seminar committees and coordinating councils who arrange and supervise the programs consist of school board members, Parent Teacher Association representatives, school administrators and faculty, and other interested members of the community.

At the present time, such seminars carry no high school or college credit. Their value is in giving able students a broader understanding and appreciation of the fields chosen—the arts, sciences, social sciences, health and medicine. They provide an opportunity for community leaders to come into closer contact with their most able youth, and to offer vocational and civic guidance.

Consideration: Nonacademic Subjects

In planning the secondary school program for able students care must be taken to insure that the student has a sufficient balance of activity. Unquestionably, an academically talented student should have every opportunity possible to gain as thorough and broad an academic education as possible. Yet he should also be encouraged to explore the full range of his abilities and interests. The comprehensive high school should offer him opportunities to:

1. Develop any creative talent he possesses. Many able pupils are gifted artistically, musically, dramatically. Occasionally they have so much talent, so widely distributed, that guidance is difficult.
2. Acquire a marketable skill. Business subjects are especially valuable for the student who must earn part of his college tuition.
3. Enroll in the courses offered in home and family living.
4. Enroll in some trade and industrial or industrial arts courses whenever these can be offered on an elective basis.
5. Pursue a full physical fitness program.
6. Develop satisfying hobbies.

Aesthetic interests, manual skills, artistic skills, and recreational interests developed during the secondary school years contribute to the balanced perspective, mental health, and social growth of the able child.

Harmonious Articulation

Consideration: Characteristics of a Good Program

At succeeding maturity levels certain concerns arise which are of continuing importance throughout the remainder of the able pupils' years in school.

PRE-SCHOOL YEARS	Parent Observation, Understanding, and Guidance
	Development of Aesthetic Experience
	Opportunities for Social Growth
KINDER-GARTEN	Mastery of English Expression
	Development of Moral Values
	Opportunities for Development of Creative Talent
	Administrative and Faculty Planning of Program
	Teacher Observation and Guidance
	Sequential Program for Fluency in a Foreign Language
EARLY ELEMENTARY YEARS	Rapid Progress in the Development of Language and Mathematics Skills
	Use of Communities Resources to Enrich Program
	Accelerated, Sequential Program of Social Studies, Science, Mathematics
	Physical Fitness Program
	Education for Family Living
LATER ELEMENTARY YEARS	Beginning of Independent Study
	Development of Individual Interests
	Introduction of Study Skills
	Individualized Reading
JUNIOR HIGH SCHOOL	Small Group and Individual Study
	Courses in Art, Music, Industrial Arts, Home Economics Planned for Able Pupils
	Secondary School Guidance Program
SENIOR HIGH SCHOOL	Summer School, Seminars, Other Enrichment Programs
	Early Admission to College
	Cooperative High School and College Courses
	Advanced Placement Courses
	Vocational Education for Able Pupils
	Business Education for Able Pupils
	Completion of Required Academic Subjects

Consideration: Selection of Materials

Programs for able pupils must be forward looking, comprehensive, and challenging. Therefore, accurate, up-to-date, well-written or well-made, stimulating materials are necessary. In the selection of such materials, consider that able pupils:

1. Need less repetition of material than do average learners.
2. Need fewer concrete illustrations: they have more ability to visualize, to interpret, and to draw conclusions than do the average pupils.
3. Have vocabularies well above average for their age levels.
4. Enjoy finding their own answers to questions and problems.
5. Read widely.
6. Compare and contrast materials.
7. Pursue interests avidly.
8. Need materials and facilities to develop their abilities for independent study and research.
9. Need materials to develop their creative talents.

It is not enough to supply able pupils with materials which "meet their needs." They should meet materials which lead them to new interests, present new ideas, and broaden and deepen their cultural concepts. To be avoided whenever possible are the repetitious, drill-type practice materials which for able students serve merely to occupy time.

The individual classroom should have both the basic materials necessary for the courses taught there, and good ready reference and resource materials. When able students participate in group or class discussions, their thinking ranges widely into cause and effect relationships and into social and historical developments concurrent with the material under discussion. They want facts upon which to draw conclusions. Many questions arise which result, if students can find an answer quickly, in effective, vital learning. To delay all such questions until students reach the library frustrates and devitalizes classroom learning.

But without question, a well-supplied instructional materials center, including a central library is a first consideration in supplying materials for able pupils. Pupils should have access to these materials both as directed by teachers and librarians and as opportunities for self-direction and self-teaching.

Science, mathematics, art, music, and physical education equipment should be available both at secondary and elementary levels. Moreover, the able pupil should always be a *participant* and not merely an *observer* in the use of such equipment.

Eye to the Future

Chapter Four

Consideration: Articulation

ADMINISTRATIVE ARTICULATION

1. Provision for able pupils exists at each level of the total school program.
2. Criteria for the program have been carefully established and are understood by faculty and community.
3. All teachers appreciate the total plan of the program, and have participated in its construction.
4. Each teacher thoroughly understands the program of the levels immediately below and above her own program.

CURRICULUM ARTICULATION

1. Study skills are emphasized and gradually developed from elementary school through college; each level supplying those necessary for successful entrance into the next.
2. If foreign language is introduced in the elementary grades, study of the same language is consecutive through elementary, junior and senior high school.
3. All subject programs are sequential through elementary, junior and senior high school.
4. The college does not require repetition of advanced high school work.

PUPIL ARTICULATION

1. Careful observation and study are made of the pupils' emotional and social adjustment.
2. There is a continuous, effective counseling program.
3. Whenever necessary, the school interprets the child's intellectual ability or special talents to parents; aids them in adjusting to his unusual abilities; and helps with plans for his college and professional education.
4. There is a planned program for introducing all elementary pupils to the junior high school, and junior high school pupils to the senior high school. Pupils are aided in their adjustment to college.
5. Movement of students into and out of the program is flexible and is accomplished without emotional distress for the pupil or his parents.

SOCIAL ARTICULATION

1. The program is accepted by the community.
2. There is a good rapport between the teachers who are part of the program and those who are not.
3. There is good rapport between the pupils who are part of the program and those who are not.

Consideration: Evaluation

Evaluation, as used here, is simply the process of determining whether the program for able pupils achieves its purpose. This evaluation is both preplanned and unplanned, formal and informal, individual and group centered.

Unplanned informal evaluation takes place whenever children, families, faculty, or community members discuss either the program or the children's progress in school. This evaluation is sometimes the most severe, the most penetrating, and yet the least subject to either proof or contradiction. An honest, forthright public relations policy is the program's best safeguard. In the end it is better to admit and

correct weaknesses of planning or instruction than to try to camouflage them. Well-written, frequent publication of the achievements attributable to the program helps to keep everyone informed as to its progress.

Planned informal evaluation includes such activities as faculty meetings for planning and development of the program, conferences with individual parents or groups of parents, planning by administrators and college representatives.

Formal evaluation implies the use of criteria. Determination of achievement by means of standardized testing is the most frequently used gauge of progress. Success of students on advanced placement and college board exams, and subsequent college success of students are other evaluation measures.

A six-page guide* has been prepared to enable teachers, supervisors, guidance workers, and administrators to rate systematically the adequacy of programs for gifted and talented students. It also gives raters an opportunity to judge the relative importance of various program adaptations.

*Passow, A. Henry and Others, ***A Guide for Rating Provisions for the Gifted,*** Bureau of Publications, Teachers' College, Columbia University, 525 West 120th Street, New York 27, New York.

Constant Evaluation

CAPSULE CONSIDERATIONS

Do—Allow parents to have a voice in the educational planning for their children.	Don't—Allow educational planning for students to become a threat to parents. "Better not comment about the high price of costumes for the May Festival. Mrs. Objector did last year and they kept Janie Objector out of the advanced arithmetic class."
Do—Make use of special talents and interests of teachers or community people.	Don't—Allow teachers or others to foist their personal hobbies upon children to no educational purpose.
Do—Provide opportunities for demonstration of progress made.	Don't—Develop a "show off" program.
Do—Encourage enrichment programs.	Don't—Permit provision for special groupings or clubs to interfere with progress or planning for the regular class group. "I can't teach a new thing or give a test in arithmetic on Tuesday, Wednesday, or Friday, because three to ten children are out for enrichment. I have to plan all my new work and tests for Monday and Thursday."
Do—Aim to develop the student's highest ability.	Don't—Set the standard unreasonably high or become competitive about achievement test results.
Do—Provide for the student's physical and emotional development.	Don't—Forget that he is still a child or an adolescent.
Do—Encourage extensive reading.	Don't—Worry if he confines his book choices to one subject for a seemingly extended period of time.
Do—Provide good library facilities and research opportunities.	Don't—Urge upon him literature which he is not yet emotionally mature enough to really appreciate.
Do—Express interest in and appreciation of the unusual work and interests of able youth. Be intelligently critical.	Don't—Fawn and gush.
Do—Be concerned about the underachiever.	Don't—Try to force every highly intelligent or creative student into the same "spoon fed" advanced academic program.

Questions for Consideration

WHAT IS THE ABLE CHILD'S SELF-CONCEPT?

Does the student have a good understanding of himself?
Does he know where and how he differs from the average?
Does he know the pattern of his abilities—where he is strong and where he is weak?
Does he have self-confidence?
Does he appreciate his culture status?
Has he the potential for social mobility?

WHAT IS HIS VOCATIONAL INTEREST?

Where does he have the greatest potential for leadership—in the professions, in politics, labor unions, business, community development?
Does the student express his own choice, or is he influenced by the ambitions of parents or other relatives?
Is the student's choice consistent with the pattern of his abilities?
Does the student have the requisite financial resources?
If financial help is needed, is it available?
Does the student have a clear conception of the time and type of preparation necessary?

WHAT IS THE SCHOOL'S ROLE IN HIS LIFE PLAN?

Are necessary guidance services supplied? (Testing, counseling, dissemination of information concerning scholarships, work opportunities, career information)
Are opportunities for cultural development available to the able but culturally deprived student?
Does the curriculum afford the preparation he needs?

Background Materials

For Initial Consideration

The following publications might be used for the beginning of in-service education in planning for able children. The entire list can be purchased for approximately ten dollars.

Brown, Kenneth E. and Johnson, P.G., ***Education for the Talented in Mathematics and Science***, 1952. Office of Education, U. S. Department of Health, Education, and Welfare. $.20.

Children's Bureau, ***Your Gifted Child***, 1958. U.S. Department of Health, Education, and Welfare, Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. $.20.

Gallagher, James J., ***The Gifted Child in the Elementary School***, 1959. National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C. $.50.

Lewis, Gertrude M., ***Educating the More Able Children in Grades Four, Five, and Six***, 1961. U. S. Department of Health, Education, and Welfare. $.35.

Kough, Jack, ***Practical Programs for the Gifted.*** Science Research Associates, Inc., 259 East Erie Street, Chicago 11, Illinois. $3.50.

National Education Association; ***Administration for the Academically Talented Student***, 1960. National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C. $1.25.

Passow, A. Harry, et al, ***Planning for Talented Youth***, 1955. Bureau of Publications, Teachers College, Columbia University, New York, New York. $1.00.

Schiefele, Marian, ***The Gifted Child in the Regular Classroom***, 1953, Bureau of Publications, Teachers College, Columbia University, New York, New York. $2.00.

Witty, Paul, et al, ***Creativity of Gifted and Talented Children***, 1959. Bureau of Publications, Teachers College, Columbia University, New York, New York. Approximate cost $1.00.

For Further Consideration

The reader is referred to the ***Annotated Bibliography on the Education of Able Pupils***, which may be obtained from the Bureau of Curriculum Development, Department of Public Instruction, Harrisburg, Pennsylvania. The following publications will also be useful:

Administration: ***Procedures and School Practices for the Academically Talented Student in the Secondary School.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C., 1960.

Conant, James B., ***The Identification of the Academically Talented Student in the American Secondary School.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C., 1958.

Copley, Frank O., ***The American High School and the Talented Student.*** University of Michigan Press, Ann Arbor, Michigan, 1961.

Donaldson, Robert R., ***Science for the Academically Talented Student in the Secondary School.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C., 1959.

Fliegler, L. A. (Ed.) ***Curriculum Planning for the Gifted.*** Prentice Hall, Englewood Cliffs, New Jersey, 1961.

Fliegler, L. A. and Bish, Charles E., ***Summary of Research on the Academically Talented Student.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C., 1959.

The Gifted Student: Cooperative Research. U. S. Department of Health, Education, and Welfare, Office of Education, Washington, D.C., 1960.

Hartshorn, W. C., Housewright, W. L., Tipton, Eleanor, ***Music for the Academically Talented Student in the Secondary School.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C.

Hlavaty, Julius H., ***Mathematics for the Academically Talented Student in the Secondary School.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C., 1959.

Jewett, Arno, ***English for the Academically Talented Student in the Secondary School.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D. C., 1960.

Klein, Milton M., ***Social Studies for the Academically Talented Student in the Secondary School.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D. C., 1960.

National Education Association, ***Finding and Educating the Academically Talented Student.*** 1201 Sixteenth Street, N.W., Washington 6, D.C.

Paschal, Elizabeth, ***Encouraging the Excellent.*** The Fund for the Advancement of Education, 477 Madison Avenue, New York 22, New York.

Starr, W. H., Thompson, M. P., Walsh, D.D., ***Modern Foreign Languages and the Academically Talented Student.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D. C., 1960.

Waetjin, Walter (Ed), ***Human Variability and Learning.*** Association for Supervision and Curriculum Development, 1201 Sixteenth Street, N.W., Washington 6, D.C., 1961.

Ward, Virgil, ***Educating the Gifted***—an axiomatic approach. Charles E. Merrill Books, Inc., 1300 Alum Creek Drive, Columbus 16, Ohio, 1961.

Ziegfield, Edwin, (Ed.), ***Art for the Academically Talented Student in the Secondary Schools.*** National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D. C.

Appendix

REGULATIONS OF THE STATE COUNCIL OF EDUCATION CONCERNING EARLY ENTRANCE OF BEGINNERS IN ACCORDANCE WITH PROVISION OF ACT 184, APPROVED JULY 27, 1953

"...The board of school directors of any school district may admit beginners who are less than five years and seven months of age in accordance with rules and regulations established by the State Council of Education.."

By the authority of the above-mentioned Act the State Council of Education hereby establishes the following rules and regulations:

A. Nothing contained in these regulations shall be construed to require a board of school directors to admit any child as a beginner who is less than five years and seven months of age.

B. The following rules and regulations shall apply to all cases of early admission of beginners in the public schools of the Commonwealth:

1. No child shall be considered for early entrance who has not attained a chronological age of five years and a mental age of seven years before September 1 if they are to be admitted in the fall. or who has not attained the chronological age of five years and a mental age of seven years before February 1 if they are to be admitted at the beginning of the second semester.

2. A child whose early admission is being considered shall be evaluated:

   a. By the county supervisor of special education having jurisdiction of the school district, or
   b. By a certified public school psychologist who is a full-time or part-time employee of the district, or
   c. By a certified public school psychologist whose professional services are acceptable to a district in which no full-time or part-time public school psychologist is employed and which does not come under the jurisdiction of the county supervisor of special education of the county in which the district is located.

The examining county supervisor of special education or public school psychologist shall administer such appropriate individual tests or battery of individual tests and shall by other subjective or objective techniques determine clearly the mental capacity, the emotional stability, the social maturity and the necessary facets of physical readiness for school activity at the level of a beginner.

3. The county supervisor of special education or public school psychologist who has examined a child shall report in writing his findings to the superintendent having jurisdiction of the district in which the child is being considered for early entrance. These findings shall include:

   a. The chronological age of the child.
   b. The mental age of the child.
   c. A specific recommendation for admission or nonadmission as an early entrant.

   These findings shall be considered to be confidential and shall be revealed only to State, county, and local school officials, and to the parents (or person standing in loco parentis) upon their request.

4. The superintendent receiving such recommendation for admission may:

   a. Approve (in writing) such recommendation and submit it to the board of school directors, or

b. Disapprove (in writing) such recommendation and submit it to the board of school directors.

5. The board of school directors may admit early entrants only if:

   a. The chronological age is five years or more, and
   b. The mental age is seven years or more, and
   c. The examining county supervisor of special education or public school psychologist has recommended such early entrance, and
   d. The superintendent of schools having jurisdiction has approved such early entrance, and
   e. The board of school directors of the district has voted favorably in the matter.

C. The action taken in the processing of the application for early entrance shall be transmitted to the parent (or person standing in loco parentis) through the office of the proper superintendent of schools.

D. An early entrant admitted in the school district of residence (or to another school district when the school district of residence so assigns) shall be subject to the same laws and regulations as beginners admitted after having attained the age of five years and seven months.

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